

CLAIMS

1. A steering system for a working vehicle comprising front wheels (1, 1), rear wheels (2, 2), and a steering apparatus (50) for steering the front wheels and the rear wheels, said steering system comprising:

mode changing means (24) provided in said steering apparatus (50) for changing over a mode of steering the front wheels (1, 1) and the rear wheels (2, 2) between two-wheel steering and four-wheel steering;

mode change instructing means (35) for instructing change of the mode of steering the front wheels and the rear wheels;

first indicating means (38) for indicating a current steering mode of the front wheels and the rear wheels;

second indicating means (38) for indicating whether the front wheels and the rear wheels are at neutral; and

control means (36, 37, 39) for not operating said mode changing means even with an instruction outputted from said mode change instructing means when said second indicating means (38) indicates that the front wheels and the rear wheels are not at neutral, for operating said mode changing means, in response to an instruction outputted from said mode change instructing means, to establish a steering mode corresponding to the instruction when said second indicating means indicates that the front wheels and the rear wheels are at neutral, and for controlling said first indicating means (38) to always indicate, as the current steering mode,

a steering mode corresponding to an operated state of said mode changing means regardless of the instruction outputted from said mode change instructing means.

2. A steering system for a working vehicle according to Claim 1, wherein:

said first indicating means (38) has a plurality of mode lamps (38a, 38b, 38c) provided corresponding to kinds of steering modes, one of the mode lamps corresponding to the current steering mode being turned on in a predetermined color, and

one or more of the plurality of mode lamps other than the mode lamp corresponding to the current steering mode function as said second indicating means (38).

3. A steering system for a working vehicle according to Claim 2, wherein:

the mode lamps (38a, 38b, 38c) functioning as said second indicating means are turned on in a color different from that of the mode lamp corresponding to the current steering mode when the front wheels (1, 1) and the rear wheels (2, 2) are in neutral positions.

4. A steering system for a working vehicle according to Claim 2 or 3, wherein:

said mode change instructing means (35) has a plurality of switches (35a, 35b, 35c) disposed in positions corresponding to the plurality of mode lamps (38a, 38b,

38c), respectively.

5. A steering system for a working vehicle according to Claim 4, wherein:

the plurality of switches (35a, 35b, 35c) are momentarily operated switches outputting signals only when operated.

6. A steering system for a working vehicle according to any one of Claims 1 to 5, wherein:

said mode changing means (24) is able to change over the mode of steering the front wheels (1, 1) and the rear wheels (2, 2) among two-wheel steering, opposite-phase four-wheel steering, and in-phase four-wheel steering.